

**Recommendations for Deer Management
West St. Louis County Deer Task Force**



July 2005

**WEST ST. LOUIS COUNTY DEER TASK FORCE
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WEST ST. LOUIS COUNTY DEER TASK FORCE RECOMMENDATIONS FOR DEER MANAGEMENT

Approved 7/6/05

The objective of the West St. Louis County Deer Task Force is to make recommendations for deer management in the West St. Louis County region. Following a comprehensive review of information on suburban deer populations and management alternatives, a resident attitude survey examining the acceptability of management alternatives, responses of the public to a Preliminary Report and two public forums, the Task Force has developed these recommendations for deer management in West St. Louis County.

The Task force recommends that area communities strive to reduce deer populations to approximately 20 deer per square mile of habitat. While residents will generally tolerate greater densities of deer (up to approximately 40 per square mile), this density is recommended as a goal in order to maximize benefits associated with deer while minimizing negatives. Further, the Task Force encourages West St. Louis County communities use these recommendations to develop a long-term deer management plan and coordinate across municipal boundaries to meet management goals.

Population Control Options

Firearms hunting

Includes potential to use one or all of the following: centerfire rifles, shotguns, muzzleloaders, and crossbows.

Advantages and Disadvantages:

- Crossbows can be useful in urban areas and have the added benefit of no noise.
- Firearms are the most efficient method for harvesting deer.
- Firearms hunting with centerfire rifles is not appropriate for many suburban areas.
- Less powerful firearms such as shotguns & muzzleloaders can be useful to harvest deer quickly but still may not be appropriate for many areas.
- Noise is a factor with rifles, shotguns, and muzzleloaders.

Recommendations:

While a successful deer management program does not necessarily require the use of firearms, the Task Force recommends municipalities consider allowing for the use of crossbows to harvest deer under Missouri wildlife regulations.

The Task Force recommends that Missouri Department of Conservation consider allowing the use of crossbows to harvest antlerless deer in select urban counties, including St. Louis County, during archery season (currently not allowed).

The Task Force recommends that each municipality examine the appropriateness of shotguns, muzzleloaders, and rifles in their community and consider allowing these methods to harvest deer in areas that are safe.

Bow hunting

Use of longbow or compound bow. Shots are usually taken from 20 yards or less from an elevated tree stand.

Advantages and Disadvantages:

- Close range of shots, minimal risk of ricochet, and tree stands make this the safest form of deer hunting.
- Noise is not a problem.
- Can be done at no cost to city or landowner. Hunter would be required to purchase tags & be responsible for meat processing.
- Task Force resident attitude survey shows this as the most acceptable method for population control.
- Landowners unfamiliar with hunting would need to be provided with guidelines for selecting bowhunters & setting rules for hunting on their property.
- Archery methods can provide an effective deer management program if applied at appropriate levels over time.
- Potential for injured deer to run onto a neighboring property can be a concern of neighbors.

Recommendations:

The Task Force recommends municipalities consider allowing the use of archery equipment to harvest deer where appropriate. The Task Force has suggestions for implementation that municipalities may find helpful (see Appendix 1: Urban Deer Hunting and Sharpshooting Process Recommendations).

The Task Force recommends that Missouri Department of Conservation offer an Urban Bowhunter Education course, similar to the current Bowhunter Education course, but with a component that addresses the special considerations of hunting in suburban areas.

Sharpshooting

Use of hired marksmen to shoot deer over bait sites. Requires a special permit from MDC.

Advantages and Disadvantages:

- Can be used to harvest many deer quickly to achieve desired deer population.
- Task Force resident attitude survey indicates this as the second most acceptable method for population control.
- Requires cooperation with police to prevent disruption of bait sites.
- A long-term plan for maintaining the deer population at reduced levels would be necessary.
- Noise of firearms may be a concern.
- Landowner(s) and/or the city would be responsible for cost of hired marksmen and meat processing. As a requirement for the permit, all deer would be donated through Share The Harvest.

Recommendations:

The Task Force recommends that sharpshooting should be used only as part of a long-term management plan to maintain the population at acceptable levels. A municipality or agency should have a management plan in place before using sharpshooters to harvest deer.

The Task Force recommends that each municipality examine the appropriateness of sharpshooting in their community and consider allowing this method to harvest deer when safe. The Task Force has suggestions for implementation that municipalities may find helpful (see Appendix 1: Urban Deer Hunting and Sharpshooting Process Recommendations).

Trap and euthanasia

Deer are trapped, most often individually in clover traps, and euthanized with a captive bolt device. Drop nets or rocket nets can be used to trap larger numbers of deer but these also require additional people and more time to run the trap; both of these trapping methods require the use of explosives. Requires a special permit from MDC.

Advantages and Disadvantages:

- Can be useful in lowering a local population if utilized for several years.
- Landowner is responsible for running trap and associated costs (MDC has traps that could be loaned).
- All deer must be donated and landowner must pay for meat processing.
- Trap and euthanasia can be useful for reducing deer numbers in small pockets. However, unless an adequate number of traps are used, this is not an efficient tool for managing overall populations.
- Task Force resident attitude survey indicates that this method is less acceptable than bowhunting and sharpshooting.
- Time and effort involved in removing each deer is greater than for other methods.

Recommendations:

The Task Force recommends the use of trap and euthanasia with captive bolt for landowners where other lethal methods are not an option.

The Task Force recommends that cities or agencies consider using trap and euthanasia only as part of a larger, long-term management program.

Trap and relocation

Deer are trapped similar to the trap and euthanasia program, with clover traps, drop nets, or rocket nets. Deer are sedated and transported to a rural location and released.

Advantages and Disadvantages:

- Not currently approved by MDC as a deer management alternative. Would require permission from the Missouri Conservation Commission.
- Due to concerns over chronic wasting disease, the transfer of live deer across county lines is prohibited by MDC.
- Cost; trapping and transport of deer is time-intensive and overall cost is high.
- Unless an adequate number of traps are used, trap and relocation is not an efficient tool for managing overall populations.
- Some deer (~20%) die from myopathy within 30 days due to the stress of relocation.
- Many additional relocated deer (~70%) die within one year from hunting, cars, poaching and dogs. Trap and relocation is not necessarily a non-lethal method.

Recommendations:

The Task Force recommends that Missouri Department of Conservation re-examine their reasoning and position on allowing trap and relocation in urban areas to reduce deer densities.

If trap and relocation is allowed in the future, the Task Force recommends that cities or agencies consider using this method only as part of a larger, long-term population management program.

Managed hunts

Through a statewide lottery system run by MDC, hunters can apply to participate in hunts on specified public lands in Missouri. Special regulations apply at each hunt, specifying what hunting method may be used, what deer can be harvested, and in what quantity.

Advantages and Disadvantages:

- May be an option for certain State, County, and Municipal Parks, or other public lands.
- Managed hunts offer an opportunity to manage deer on public lands in a controlled situation.
- Not feasible for individual landowners.

Recommendations:

The Task Force recommends that Missouri Department of Conservation continue to administer annual managed hunts at Rockwoods Reservation, Rockwoods Range and Forest 44 Conservation Area. The Task Force also recommends that Missouri Department of Natural Resources (DNR) continue to administer the managed hunt at Babler State Park.

The Task Force recommends that Missouri Department of Natural Resources and St. Louis County Parks consider cooperating with Missouri Department of Conservation to administer managed hunts at other state and county park areas in west St. Louis County, such as Route 66 State Park, the Lincoln Beach addition of Castlewood State Park, Greensfelder County Park, and West Tyson County Park. A partnership between agencies to administer a managed hunt across several of these properties would increase the overall success of the management program.

The Task Force recommends Missouri Department of Conservation, Missouri Department of Natural Resources and St. Louis County Parks study the deer populations closely on public lands and conduct aerial deer population surveys over areas that have potential to be sites for future managed hunts.

The Task Force recommends that municipalities examine their city parks and other public lands, and consider working with Missouri Department of Conservation to administer managed hunts on appropriate areas.

Fertility Control

While a variety of fertility control methods have been the subject of research, SpayVac[®] is the method sought by many suburban residents as a solution to deer overpopulation. With this method, does are trapped, tagged, and treated with a vaccine to prevent conception. Subsequent treatments are necessary. Permits from MDC and the Food and Drug Administration (FDA) are required to use SpayVac[®] for experimental purposes; the project must prove to have unique research value to receive the permit.

Advantages and Disadvantages:

- Would require a group to apply and administer the project.
- Long-term efficacy of immunocontraception in whitetails has been demonstrated only for populations of confined deer, not free-ranging populations.
- Population reduction would be slow without any deer removal.
- Effect on breeding behavior of deer is unknown as does continue estrous cycles after treatment.
- Cost; trapping and treatment of deer is time-intensive and overall costs are high.

Recommendations:

Due to the experimental nature and various unknowns regarding fertility control with immunocontraception, the Task Force does not recommend the use of immunocontraception (i.e., SpayVac[®] or other Porcine Zona Pellucida immunogenic drugs) as deer management.

The Task Force recommends that Missouri Department of Conservation and municipalities reconsider the use of immunocontraception in the future if researchers determine it can be effectively and efficiently applied in free-ranging populations to reduce deer numbers.

The Task Force does not recommend the use of other types of fertility control (sterilization, contraception, and contragestation) as deer management. These methods are impractical for reducing populations of free-ranging deer.

Damage control alternatives:

Traffic safety devices

Lower speed limits, deer crossing warning signs, road construction with wildlife corridors, roadside reflectors, and roadside fencing.

Advantages and Disadvantages:

- Deer crossing signs can be a good tool to warn motorists who are unfamiliar with an area of the potential for deer on roadway.
- While research on the effectiveness of roadside reflectors is mixed, reflectors have not proven to reduce incidence of deer-vehicle collisions.
- Roadside fencing is expensive and impractical due to miles of roadway.
- Lower speed limits is not a long-term solution and may not be realistic.

Recommendations:

Lower speed limits: The Task Force recommends municipalities and St. Louis County examine areas with a high incidence of deer-vehicle collisions and consider lowering speed limits or increasing enforcement in those areas, especially during October through December when most deer-vehicle accidents occur.

Deer crossing signs: The Task Force recommends the use of “deer crossing” warning signs along roads with a high incidence of deer vehicle collisions. Although drivers may become accustomed to such warnings over time, they are an important and economical way to warn motorists about the risk of deer on the roadway.

The Task Force also recommends the use of an alternate deer crossing sign, which flashes lights or flips down to reveal a “Deer Active!” warning during the months of October through December. A change in the standard warning during the highest risk months may help to remind drivers, who are otherwise accustomed to the standard warning, of the increased chance of hitting a deer.

Road construction with wildlife corridors: The Task Force recommends that, when feasible, planners consider the construction of wildlife corridors under newly constructed roadways to reduce the number of deer-vehicle collisions.

Roadside reflectors: The Task Force does not recommend St. Louis County or municipalities utilize reflectors in an attempt to reduce deer-vehicle collisions.

Roadside fencing: The Task Force does not recommend the use of roadside fencing to minimize deer-vehicle collisions because fencing roads is impractical.

Landscape repellants

Advantages and Disadvantages:

- Can be a good tool for small landowners, but not practical for large properties or large-scale, community-wide efforts.
- Many repellants are on the market; all have mixed results.

Recommendations:

The Task Force recommends that landowners in areas of high deer densities consider using repellants on valued landscape plants to protect them from deer browse.

Periodically changing the type of repellant used and following application instructions may increase effectiveness.

The Task Force recommends that Missouri Department of Conservation continue to provide information on repellants, deer resistant landscaping, and deer damage control methods to landowners and land managers.

Fencing

Advantages and Disadvantages:

- Exclusion fencing and electric fencing can be very effective for damage control on individual properties.
- Single or double wire electric fencing is relatively inexpensive and unobtrusive. It can be an effective and safe method of protecting valuable landscaping from deer damage.
- Some municipalities and neighborhood organizations prohibit one or both types of fencing, making deer damage worse for certain landowners.

Recommendations:

While exclusion fencing may not be desirable in many neighborhoods, the Task Force recommends that municipalities and neighborhood organizations consider allowing the use of exclusion fencing as appropriate to help alleviate severe deer damage.

The Task Force recommends that municipalities consider allowing the use of electric fencing, which is unobtrusive, for landowners experiencing deer damage to their gardens and landscaping.

The Task Force recommends that Missouri Department of Conservation staff provide technical assistance to landowners in installing electric fencing to prevent deer damage.

Prohibit supplemental feeding

Advantages and Disadvantages:

- Can help alleviate problems of severe damage to landscaping and deer feces around feeding sites.
- Supplemental feeding of deer is often not healthy for deer and can promote the spread of diseases like tuberculosis.

Recommendations:

When residents in an area experience increased deer damage because of neighbors providing supplemental food to deer, the Task Force recommends municipalities consider a prohibition on the feeding of deer. The Task Force has suggestions for implementation that municipalities may find helpful (see Appendix 2: Prohibiting Supplemental Feeding of Deer Ordinance Recommendations).

The Task Force recommends that municipalities consult Missouri Department of Conservation for technical assistance in writing an ordinance that prohibits the supplemental feeding of deer.

APPENDIX 1:

WEST ST. LOUIS COUNTY DEER TASK FORCE URBAN DEER HUNTING & SHARPSHOOTING PROCESS RECOMMENDATIONS

In reviewing deer harvest opportunities and making recommendations for implementing lethal deer population control, we divided opportunities into two categories: (1) hunting under statewide archery and/or firearms seasons and (2) sharpshooting (which requires a special deer damage permit).

Statewide archery and firearms regulations allow unlimited amount of antlerless harvest in the St. Louis area. Utilizing statewide deer seasons to control the population focuses on long-term management and requires no additional permits beyond deer tags from Missouri Department of Conservation (MDC). It is recommended that urban communities faced with overabundant deer populations allow landowners to participate in the annual statewide archery and/or firearms seasons before pursuing a deer damage permit for sharpshooting. By allowing for deer harvest during archery and/or firearms seasons, a community provides the framework for long-term management of deer. Additional permits for sharpshooting, when combined with annual hunting under statewide regulations, will allow for the most efficient and cost-effective reduction and maintenance of deer numbers.

Statewide Archery or Firearms Regulations: Recommended Process for Implementation
When suburban communities implement strategies for harvesting of deer during statewide deer hunting seasons, we recommend the following process:

1. Ordinance revision. Many suburban communities currently have “no projectile” ordinances that prohibit residents from participating in annual statewide archery (bowhunting) and firearms seasons. Revising restrictive ordinances to allow for bowhunting of deer under statewide regulations is necessary in these cases. A city may choose to allow bowhunting while restricting firearms. The subcommittee suggests that an ordinance regarding projectiles (archery) in a municipality should include the following key factors:
 - a. Allow for archery and/or firearms under statewide regulations (seasons and limits set annually by MDC).
 - b. Allow for archery and/or firearm hunting on properties of (1-5) acres or greater. Actual acreage requirement will depend on the desires of a given municipality.
 - c. Allow landowners to combine adjoining properties to meet the acreage requirement.
 - d. If a city has a “no firearms” ordinance, we recommend that the city provide an exception that allows for the use of firearms for sharpshooting with special deer damage permit, issued by MDC in coordination with city (sharpshooting process outlined below).
 - e. City may choose to require landowners to register hunted properties.

2. Landowner education. Many suburban landowners are unfamiliar with hunting. It is recommended that the city coordinate with MDC's urban wildlife biologist to provide education for landowners on how to choose hunters and how to negotiate 'permission to hunt' agreements (see #3).
3. 'Permission to hunt' agreement. A template 'permission to hunt' agreement should be developed for landowners to use when setting rules and guidelines for hunters on their property. Items in a "Permission to Hunt Agreement" template should include target number of antlerless deer to be harvested, dates of agreement, any non-hunttable areas, and other special landowner requirements.
4. Written record of notification. A city may choose to require landowners who are allowing hunting to maintain a written record of notification of contiguous landowners. Such record should include a checklist of neighboring landowners to be notified. The landowner would be responsible for recording who, when, and how they notified neighboring landowners that their property will be hunted (e.g., Notified landowner Smith on 9/10/2004 by phone conversation).
5. Bowhunter education course. An optional Bowhunter Education course should be made available through MDC. Bowhunters could take the course to gain a better understanding of the unique factors involved in urban bowhunting and learn how to be a responsible and discreet urban bowhunter. A list of bowhunters who completed the course and are interested in hunting urban properties could then be made available to cities.

Sharpshooting Using Firearms: Recommended Process for Implementation

When implementing strategies to allow for harvest of deer in a suburban community by sharpshooting with firearms, we recommend the following process:

1. Ordinance revision. (See #1 under Statewide Archery or Firearms Regulations). Before a sharpshoot program is pursued, it is recommended that a city first have an ordinance in place that allows for the harvest of deer during the statewide archery season. Without this strategy for long-term management, a short-term solution will have limited effectiveness.
2. Special deer damage permit. A sharpshoot program to harvest deer using firearms and bait requires a special deer damage permit. This permit is issued by an MDC Conservation Agent. It is recommended that a landowner or community interested in receiving a permit contact MDC at least 2 months prior to the preferred start of the permit. A site visit by MDC staff is recommended to assess deer damage and the appropriateness of the site.
3. Designation of sharpshooters. The permit holder must decide whether or not to hire professionals to conduct the sharpshooting. The permit holder may decide to hire professional sharpshooters or designate other sharpshooters to be listed on the special permit.
 - a. Cities may require and administer additional proficiency tests to screen potential sharpshooters. Such tests would need to be administered at a municipal level. It may be possible to cooperate with MDC shooting ranges to make this possible.

4. Notification requirements. The permit holder should meet certain notification requirements, which may include some or all of the following:
 - a. Notification of neighboring landowners. At least 2 weeks prior to the start of the permit, neighboring landowners (which may be contiguous landowners or the entire neighborhood) should be notified of the sharpshoot program by a neighborhood meeting, mailing, newspaper posting, and/or through a notification checklist (see #4 under Statewide Archery or Firearms Regulations).
 - b. Notification of police. The police responsible for patrolling the area where the sharpshooting will take place should be notified of the program before the start of the permit. City or police may require the landowner to notify police dispatch before each sharpshoot session. Sharpshooters should coordinate with police to prevent tampering with bait sites.
 - c. Notification of other city residents. City residents who are not neighboring landowners of the permitted property may receive information about the dates and locations of special deer damage permits by contacting the city or MDC.

APPENDIX 2:

WEST ST. LOUIS COUNTY DEER TASK FORCE PROHIBITING SUPPLEMENTAL FEEDING OF DEER ORDINANCE RECOMMENDATIONS

Providing supplemental food to suburban deer in areas of high deer densities can exacerbate conflicts between neighbors and deer by leading to extensive landscape damage. Often, education on the subject can solve individual problems; MDC can provide educational materials and assistance in outreach to homeowners regarding the feeding of urban deer. In other cases, municipal ordinances prohibiting the feeding of deer may be beneficial to the overall community.

The following is a template ordinance which cities may use or modify to prohibit the supplemental feeding of deer in their community:

Section 1. The feeding of white-tailed deer within the City limits, which feeding results in the deposit of refuse, debris, fecal matter or other offensive substance or in the attraction of wildlife, creating the prejudice or annoyance of any person, unless otherwise permitted by law, is prohibited.

Section 2. No person shall deposit, place, distribute or leave any food, of any kind or nature, with the intent to feed white-tailed deer on public or private lands, within the City.

Section 3. The provisions of this Ordinance shall not apply to any resident or agent of the City authorized to implement a wildlife management program and who possesses the necessary permits from the Missouri Department of Conservation, nor shall it apply to any public officer or public employee in the performance of his or her duties. The provisions of this Ordinance shall not apply to the feeding of domestic animals.

Section 4. Any person who shall violate or fail to comply with the provisions of this Ordinance may, upon conviction, be punished by a fine not to exceed Five Hundred Dollars (\$500) or confinement not to exceed ninety (90) days, or both. Each act in which a person violates this Ordinance shall be considered a separate incident and may be punished as a separate occurrence.

Section 5. This Ordinance shall be in full force and effect from and after its passage and approval.